



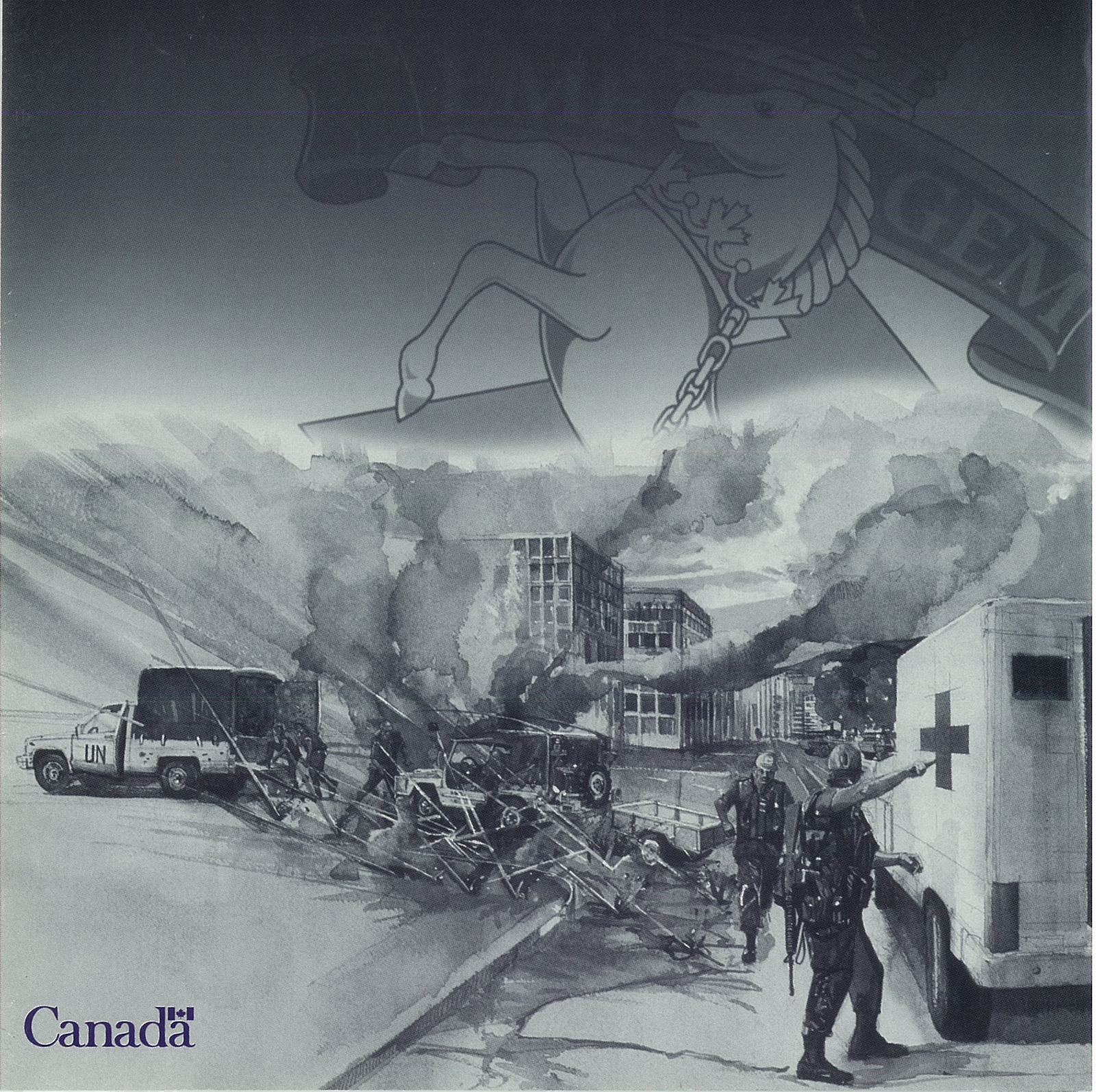
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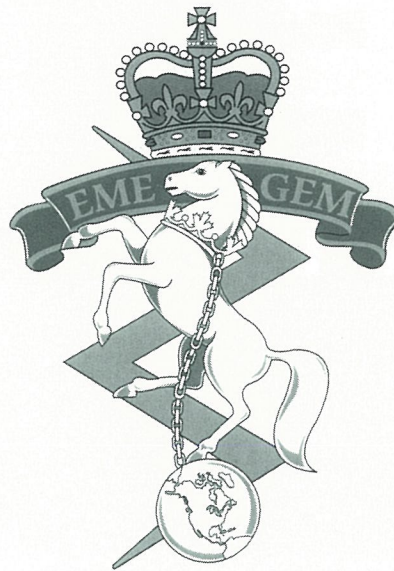
1 / 95

# EME

## JOURNAL



Canada



## EME JOURNAL

The EME Journal is the magazine of the Electrical and Mechanical Engineering Branch, published at NDHQ under the terms of reference of the Director General Land Engineering and Maintenance and the EME Branch Adviser. The purpose of the publication is to disseminate professional information among members and exchange opinions, ideas, experience and personnel news, and promote the identity of the EME Branch.

The EME Journal depends upon its readers for content. Articles on all aspects of the Electrical and Mechanical Engineering System, photographs, cartoons, people news and comments are solicited. Readers are reminded that the Journal is an unclassified and unofficial source of information. The contents do not necessarily represent official DND policy and are not to be quoted as authority for action.

Contributors are asked to submit the original text typewritten, accompanied by a disk in WordPerfect format. Photos should be sharp, glossy black and white or colour prints with captions typed separately. Personnel should be identified in all cases, both text and captions, by rank, initials, surname, trade and unit.

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Print made by Katherine Taylor  
for Col Murray C. Johnston.  
This print is from Cpl JJ  
Boudreault's memories of  
Sarajevo during Spring 1992.

# TABLE OF CONTENTS

## Heading Forward

*From the Branch Advisor*..... 2

## From the Branch CWO

*Chief Warrant Officer A.E. Rest* ..... 3

**In the Next Issue** ..... 3

## Erratum

*An error slipped into our last Journal*..... 3

## Electrical and Mechanical Engineering

### Association News

*A word from Mr. Adams* ..... 4

## Soldier First!

*An EME Technician under fire in Sarajevo* ..... 5

## Grear Building

*Opening the L/Cpl H.W. Grear Building,  
the New Base EME Workshop* ..... 8

## An Honour Roll Scroll in the Museum of 11 (Victoria) Service Battalion

*The EME Museum is presented an Honour Scroll* ..... 9

## Captain Kodak, CF Amateur Photographer of the Year

*Capt Frost is selected 1993 Amateur  
Photographer of the year* ..... 9

## The D-Day Tank

*ANEMIC/BOLD has been rejuvenated* ..... 10

## The Big History of a Little ARV Key

*The overseas trip of an ARV Key* ..... 12

## EME Goes Underground!

*The Regional Operations Control Centre  
of CFB North Bay* ..... 13

## Helicopter Recovery Made Easy

*2 Wing of CFB Toronto recover a  
military helicopter* ..... 14

## EME Squadron to the rescue!

*Rebuilt of a M151 Jeep by the EME Sqn  
of CFB Ottawa* ..... 15

## SOFLAM Challenge

*Development of a LASER target designator  
for the former Yugoslavia* ..... 16

## Excellence in Engineering

*LETE developed a fibre-optic command and  
control link for a remotely-operated vehicle.* ..... 18

## Winner of the Funny Story Contest

*A recovery operation told by a former  
member of RCOC* ..... 18

## A Traditional Celebration When You Are 50 Years Old

*Who has the honour to offer their best  
wishes to the DG?* ..... 19

## EME Branch Kit Shop

*Mess Dress* ..... 19

## 50th Anniversary Hockey Tournament

*Hockey Tournament at CFB Borden* ..... 20

## Champlain's Astrolabe

*A replica is presented to the Museum  
of Civilization* ..... 21

## 50 Years Young and Still Catching the Big Ones!

*The latest cartoon of the artist Earl Hodge* ..... 22

## Atlantic Region EME 50th Anniversary Golf Tournament

*Fog and rain were at the RV* ..... 23

## The pre-publication price for "CANADA'S CRAFTSMEN at 50" is still ON

..... 25

## Accreditation of the EME Occupations by The Canadian Council of Technicians and Technologists (CCTT) – Update

*Adjustment courses for civilian  
certification of MOC's* ..... 26

## EME NEWS...

*EME's Maclean* ..... 28

# Heading Forward

*Brigadier-General V Pergat*

**T**he RCEME 50th Anniversary is now behind us. CFSEME had the honour to officially close the activities held for the 50th Anniversary. The last event was the EME Branch 50th Anniversary Hockey Tournament held at CFB Borden from the 7-10 December 1994. In all 14 teams competed which made the event another successful activity of the RCEME 50th Anniversary Celebrations. Once again congratulation to the

organisers for the success attained by the tournament and for a job well done.

I want to take this opportunity to comment the latest developments within the CF. I would like to emphasize the excellent work done by members of the EMEA that participated and contributed to the development of the "Report of the Special Joint Committee on Canada's Defence Policy". As you may know this report has been used as a foundation to set the goals

stated in the 1994 - Defence White Paper issued on 2 December, 1994.

For those of you who have reviewed the document you will have realized that the land forces still maintain an important role for the future. The CF multipurpose combat capabilities are now recognized as essential in order to carry out a wide variety of domestic and international operations. Efforts will be made to cater for the recognized operational deficiency in the armoured personnel carrier fleet. The CF will acquire new armoured personnel carriers commencing in 1997 in addition to keeping in service the Bison APC's. The fleet of Cougar armoured training vehicles will eventually have to be also replaced.

As you have noticed the CF is heading for major changes. We will be called to rationalize our efforts and to maintain the level of activity that will permit us to reach the objectives and the mandate given by the Canadian Government to the CF and the land forces. The EME members are, as we have displayed in the past, enablers to the process of renewing and restructuring within the CF. The EME Branch is an essential resource for all new developments considered by the Land Forces.

In the next issue we will carry a series of articles on the changes in the CF, its impact on the EME Branch and what we as a Branch are going to do to adapt to the changes. I have faith in the EME Branch and especially its members for their capacity to accomplish the tasks and to meet the challenges that lie ahead of us.



# FROM THE BRANCH CWO

By Chief Warrant Officer A.E. Rest

**Y**ou may have noticed that our Journal has a new Production Editor (the person who does the real work). He is Major Rochon. Major Espenant has been sent off for Post Graduate training in sunny England. No, his posting had nothing to do with the slightly irreverent comments he occasionally penned for the Journal.

Major Rochon also has a sense of humour. I am sure it will emerge in future issues so watch for it. Like all Production Editors he must search far and wide for something interesting to fill the pages of every issue. If you have a topic that is of interest to the rest of us grab your pen (or key board) and start writing. You don't have to be Pulitzer Prize material to be published in this forum. One of the best contributions for the 50th Anniversary Commemorative Document (whose editors were harder to please) was submitted by a Corporal, in his own hand writing. Check the back of the front cover for further details.

It is always wise to prepare for the future. All of us will hang up our uniforms at some point in our lives and face the prospect of life after the EME Branch. We are more fortunate than many of our customers because our training has given us marketable knowledge and skills. We simply

need to translate these into something that is recognized outside the military world. The tools used to establish your credentials are accreditation and certification. Issue 3/94 explained this process and told you what your Branch was doing to in regards to accreditation. Much progress has been made since then. Hats off to the staff at CFSEME for the excellent job they did in presenting the school curriculum. By now provincial societies should have the information they need to process technician or technologist certification requests in a simplified manner. Full details have been provided to Command and Area Head Wrenches. The reference is 5768-1 (DLES 3-4-2-4) dated 19 January 1995. Your BPSO can also get this information from DPPS 5. Look for an article in this issue of the EME Journal.

The next problem we need to tackle is accreditation towards journeyman trades certification by provincial labour boards. This affects some EME trades more than others. DPPS 5 has been engaged in updating accreditation for the Red Seal program (inter



provincial certification) but appears to be at an impasse. Your Branch representatives hope to speed up the process for EME trades in the coming months.

Time and space are about to run out for this issue. In the next EME Journal I hope to provide an update on Junior Leader Training for EME personnel.

**Arte et Marte.**

## IN THE NEXT ISSUE (2/95):

- |                   |                 |                       |
|-------------------|-----------------|-----------------------|
| • Closure of LETE | • Seacoy        | • CANBAT 1            |
| • Closure of ETFC | • Golan Heights | • Gun Muffler         |
| • Thule           | • CANLOGBAT     | • Spray Paint Systems |

## ERRATUM

A mistake has made its way in the last edition (4/94) of the EME Journal at page 31. In the right hand side picture of the centre of the page, the photo caption is inaccurate since Maj Rutter and Capt Sardana do not appear in the picture. Then who is the mysterious couple?

# ELECTRICAL AND MECHANICAL ENGINEERING ASSOCIATION NEWS

BY A. M. ADAMS, PRESIDENT

## HIGHLIGHTS OF THE 48TH ANNUAL CONFERENCE-EMEA -CAMP BORDEN

After an absence of one year, the Association's Annual General Meeting returned to Camp Borden. The meeting was well attended by representatives from both regular and reserve units as well as many chapter members with a total registration of sixty. 120 attended the closing Mess Dinner. Welcoming talks were given by the Base Commander, Col Morint, and the CFSEME Commandant, LCol Clarke. As usual, both the Branch Advisor, BGen Pergat, and the Colonel Commandant, Col Johnston, gave very informative presentations on past and future happenings in the Branch. For the first time, a representative of the RCEME Association attended the initial executive meeting to outline the Association's plans for the 50th Anniversary celebrations.

During the meeting seven resolutions were presented by various chapters, and four were retained and forwarded to the CDA and LFCHQ. Once again, Col John Leggatt and his group presented an interesting seminary on "A Report Card on Total Force". This format has proven very successful and the time allocated for this part of the annual AGM will be increased next year. The participation of the SSO Maint from LFCHQ and his four area G4's greatly contributed to the success of the seminar.

## ASSOCIATION PRIZES AND COMPETITIONS

The Prizes and Award program continued in 1994 under the able direction of Maj Don McKinley. Framed award certificates were presented to the ten "Best Students" attending reserve integrated courses. Three plaques were also

presented to members of the reserve training incremental staff for their outstanding performances during the summer. These certificates and plaques were presented by various members of the Toronto and Kingston Chapters of the Association.

The "Best Craftsman" award program was carried out again in 1993 with seven Service Battalions submitting names; certificates were issued to each nominee. The Best Craftsman plaque was awarded to Master Corporal (now Sgt) Steven Kelly of 55e Bataillon des services du Canada (Milice) on 8 February 1994. The Commanding Officer, LCol Perrault paraded the entire Battalion and the plaque was presented by LCol (Retd) N.E. LaViolette of Quebec City. LCol LaViolette is a member of the Association.

The present system of awards will continue in 1994, but will be altered slightly in 1995 to follow more closely the present configuration of Land Forces Command. Militia Service Battalions will still be asked to nominate candidates who will be given certificates, and a Best Craftsman plaque will be awarded in each of the four areas.

## Membership

Jack Wilkin continues to beat the bushes for new members. Although we did not reach our goal of 350, we did exceed 300 and look forward to achieving our goal in 1994, our Anniversary year. Please note the Association Treasurer's address should be:

LCol Bob Hilliard  
38 Roywood Drive  
Don Hills, Ontario  
M3A 2C6



*On the 8th of February 1994, the personnel of 55e Bataillon des services du Canada (Milice) turned out on parade to officially acknowledge the accomplishment of one of their colleagues, MCpl Steven Kelly. LCol (Retd) Norbert LaViolette, on behalf of the EME Association, presented (now) Sgt Kelly with the EME Association plaque for "Best Craftsman of the year 1993 - Militia Service Battalions". LCol Laurent Perreault is the Commanding Officer of the Battalion.*

# SOLDIER FIRST !

By Cpl J.J. Boudreault

**O**n the 6 June 1992 at Polom Camp near Daruvar, Croatia, the 1er R22eR maintenance platoon was gathering at the unit canteen. At this time, we were all aware of the rumour concerning an eventual deployment of the Canadian Contingent to Sarajevo, Bosnia. During the O Group, Warrant Officer Ethier announced to us that a mission to Belgrade was being planned for the Reconnaissance Officer and that only one Vehicle Technician would be involved. No names were mentioned at that time. A few minutes later, in the workshop I was informed by Warrant Officers Ethier and Coutu that I would be the one accompanying the Reconnaissance Officer on the mission to Belgrade with my Mobile Repair Team (MRT). My initial reaction was "why only one Vehicle Technician"; the only possible answer was to deploy a minimum number of personnel.

The following morning at approximately 0530 hrs, the reconnaissance (recce) convoy of French and Canadian UN troops departed for Belgrade by way of Vukovar. The city of Vukovar was devastated by mass destruction and death. Upon arrival in Belgrade, we realized that the Canadian embargo against the Serbs was hurting the general population. People were starving and crying for food. In fear of the negative consequences of this embargo by Canada, the Canadian contingent was directed to wear civilian attire, to maintain anonymous. Later on that same day, we could feel the tension beginning to rise among the members of the convoy as further direction concerning our task was being passed. At that time, I focused my attention on the maintenance of the convoy's fleet of fifteen vehicles with the objective of obtaining 100% serviceability of the fleet.

The morning of 8 June, the recce convoy was taken to an emergency meeting in the main lounge of the Yugoslavia Hotel. Lieutenant-Colonel Jones the Commanding Officer of the Canadian Contingent passed the details of the recce mission to Sarajevo. The objective of the recce was the Sarajevo Airport with the intention of opening the airport to allow for humanitarian relief flights to land and feed the starving population. The initial plan was to have all the officers travel by helicopter to the

Sarajevo airport and to have the drivers travel the remaining distance with a French Army convoy of more than 65 vehicles.

After only a few hours, problems started to arise. First of all, the officers were denied clearance for the helicopters by the Serbs and consequently had to catch up to the rest of the convoy by vehicle. The terrain covered by the convoy was mountainous, and very enduring on the convoy vehicles. The convoy halted on a mountainous site located approximately 800 meters from Tito Camp, of the Yugoslavian National Army (J.N.A.). I had to perform numerous brake jobs due to the extreme road conditions. While the rest of the party was preparing

to eat I was forced to repair our ambulance which I had recovered during the move. It was at this time that an assault gun hidden at approximately 40 meters behind me started firing on the Muslims. Fearing that our position would be revealed, we were forced to move immediately.

A General of the Yugoslavia National Army (J.N.A.) offered the convoy protection in their camp so the convoy departed immediately for Tito Camp. Shortly after departing our location, the area was bombed and completely destroyed. Operating the convoys only MRT, I was the last to leave the site trailing the convoy with the unserviceable ambulance in tow behind me.

Upon arrival at Tito Camp, we prepared to bed down for the night. At approximately 2300 hrs we were awoken by heavy gun and mortar fire. A French private on sentry duty alerted us to take cover and to "get in the armoured vehicles". Cpl Rodrigue (my co-driver) and I jumped into the closest armoured vehicle. All the vehicles were being struck by enemy fire. After about ten minutes, we were forced to get out of our protective cover and to adopt a defensive position. In an attempt to adopt this position I was stopped in my tracks by shots that just missed me. It was the first time in my life that I was



involved in a real battle which lasted around 35 minutes. At that time I thought it would never end and that we would all die.

The next morning, I went to work to restore the convoy's mobility. We finally arrived in Sarajevo later that day, the citizens were scared and sick and were kept as hostages within the city. The citizens thought we would liberate them from their hell. They threw flowers at us and reach for us begging us, to liberate them and to end the war but we all knew that we couldn't stop their war.

Once we arrived at the United Nations Protection Force Headquarters, I had to verify the serviceability of all our vehicles. After that task I then proceeded to help two French Army Vehicle Technicians to repair their equipment.

Later that same day the recce of the airport was started and I was asked to participate in the recce. My job was to establish a list of all serviceable and repairable airfield support vehicles and equipment, in order to re-open the airport.

The airport was occupied by the Serbs but a majority of the territory surrounding the airport was held by the Muslims. The Serbs did not want to lose this ground. The Serbs feared the Muslims would use force to extradite the UN contingent from the airport if they do not maintain a presence there. Negotiation by the UN with the Serbs to reopen the airport were very sensitive. Only through cooperation with the Serbs could the reopening of the airport be possible. Either way the UN would be placing themselves in a very delicate position between these two forces on a piece of ground that was valuable and wanted by both sides.

In the meantime, the journalists who had been following us had received

extensive damage to their vehicles. They arrived at the UN HQ requesting vehicle repairs and other logistic support. Even the Bosnian ambulances that were picking up dead bodies requested logistic support from the UN forces.

We remained in the UN HQ region for two weeks. Throughout that time we endured repeated and continuous attacks.

General Mackenzie decided that all 24 Canadian and 20 French Commandos would take possession and re-open the airport. The big question was "would the Serbs cooperate when asked to leave the area and give it up to UN forces" Unfortunately they would not be so cooperative. On deploying to the airport which was a distance of about 800 m one of our iltis' broke down. It was definitely not the right time. I was forced to tow it with my MRT. On route to the airport, the streets were littered with the dead bodies of Serbs and Muslim soldiers and of abandoned and starving children. It was impossible for me not to give them parts of my own rations. Upon arriving at the airport, we parked all small vehicles inside a building with the Medium Logistic Vehicles Wheeled (MLVW) parked in front of the building to provide frontal protection. Within 30 minutes of our arrival, a sniper began firing on our location, breaking half of the windows to the building, believing we were with the Serbs.

I immediately began the task of repairing all non-serviceable equipment. In addition there was no electricity in our building but Lieutenant Colonel Jones and Major Milot asked me to find a solution. While talking to a Serb electrician I was able to understand that there was a generator situated in a building on the other side of a position held by the Serbs. In an attempt to

retrieve the generator a sniper began firing as we tried to pass the Serbs position. We were forced to take shelter, witnessing a Serbs security guard being shot right beside us. Sergeant Sylvestre the UN medical tech tried to save him but it was too late. In frustration, the Serbs aligned all their tanks and fired upon the Muslim village ignoring the civilian population. It was awful.

After abandoning the generator idea, I discovered an electrical panel which was wired with a very high voltage. With some work we were able to convert it to a useful voltage. In a short period of time we were finally able to plug in a television and a video machine. This had a significant impact on the morale of the troops to have these luxuries along with hot coffee. The French Soldiers were impressed with our ability to quickly acquire these simple luxuries.

We remained for three days in this location enduring numerous mortar and sniper attacks. On the third day, we sustained what should have been the last Muslim attack in this location. Lieutenant Colonel Jones decided that we should retreat back to Daruvar where we could better protect ourselves and get out of the line of fire between the Muslims and the Serbs. The CO said to me "Boubou repair all the MLVWs so we can move back to Daruvar". The drivers repaired all the flat tires while I fixed radiators and various hoses. In the meantime we awaited the arrival of The French Army to provide support for our move back to Daruvar. When they finally arrived the Muslims re-initiated the firing of heavy guns and mortars on our position.

In readying my vehicle for the move I could hear incoming mortar that was coming in very close to our location. I dove for cover within seconds of a

severe shrapnel blast that I felt spray just over my head. I can tell you, we almost all died. We were blessed by God.

The convoy again began the move back to UN HQ building a distance of about 800 m. I was in the last vehicle of the pack still towing the Iltis with the broken camshaft. At approximately 200 meters from the HQ, the Muslims resumed their attack on our positions. This time, an Iltis with three passengers received a direct hit by a mortar. The driver was hit in the thigh. He quickly abandoned the Iltis and ran for the ambulance a few vehicles ahead of them. Lieutenant Gray the passenger sitting in the back seat of the vehicle received extensive injuries but was saved by his flack vest. The third passenger, a major who was sitting in the passenger seat went into shock and jumped out of the vehicle leaving himself without cover standing in front of the vehicle. In the meantime, the remainder of the convoy bolted for the cover of the HQ building, leaving the downed Iltis and its two remaining passengers. Without thinking, I towed the Iltis with the broken camshaft to the headquarters's parking lot, and subsequently returned to the incident site as fast as possible to pick up the two personnel, their vehicle and trailer. All this was performed under intense fire from the Muslims and I felt that my ears would pop out of my head because of the blasts of the explosion.

While I was recovering the Iltis, I robotically operated in an adrenal high believing that the only thing that could save us would be the availability of all our vehicles. This attack happened at approximately 1400 hrs. The engine block of the mortared Iltis was cracked open, the radiator was pierced, the water pump hose split, etc. I fixed it all as well as the Iltis with the broken camshaft with spare parts from a destroyed Volkswagen Golf that had been hit by a mortar and .50

cal machine gun. I could not eat because I was almost hypnotized by all the work that had to be done to take us out of there. Only after many hours of work, would I let myself be pulled away from what had to be done, by two fellow soldiers but that wasn't until 1 am.

The next morning, I was able to save four tires out of six and on one tire in particular, I had to put on 17 patches. At that time Lieutenant Colonel Jones passed the orders to prepare for the move to Daruvar. The only accessible road was through the mountains and across Muslim territory. It was obvious that we would lose precious time trying to drive through these adverse conditions. Young children and starving soldiers could be seen on the side of the roads and it was humanly impossible not to share our rations. The road was very narrow and it was consequently risky to drive a MLVW. While driving through the cliffs, I had to replace fuel pumps on Iltis due to the extreme heat. Needless to say transmissions were breaking down as well. The convoy finally stopped, 90 vehicles (French and Canadians) spread over 500 meters and under radio silence. It was impossible for me to know what was going on in front of the convoy. We also had to help the journalists who were not equipped with all terrain vehicles, repairing their only mean of transportation. My partner was also making coffee and food.

An hour later, Lieutenant Colonel Jones came to me, both hands in his pockets, and asked me "Boubou, get in front of the convoy, there is a French Armoured Vehicle (FAV) who almost fell off a cliff and they can't pull it out of there". Once on location, I used a Muslim crane to help a French Army mechanic to recover the FAV. That was not all, no more than a kilometre away a

Muslim tow truck was stuck in the mud above the axles. Once again our expertise was requested this time to recover a Muslim vehicle. This the CO was not enthusiastic about. He did not want to leave us on our own (my co driver and I) with my MRT and a French Army soldier with his vehicle. Unfortunately he was given very little choice but to comply. Anyway after completing this recovery, my co-driver and I had to catch up with the convoy across the mountains which was extremely difficult due to the darkness. At approximately 0400 hrs, we left for Belgrade located 300 kilometres from our actual location. We finally arrived there three days later with nine flat tires and numerous mechanical breakdowns.

Once arrived at the Jugoslavia Hotel in Belgrade, the whole recce party was directed to the rooms to relax but Cpl Rodrigue and I had to repair all the flat tires on the MLVWs and Iltis for the next move.

The next morning we were moving again to Daruvar. After the first day we arrived at Camp Polom to finally see, with great joy, our peers of the 1er R22eR maintenance platoon. At that time we were confident to see our families in the near future but this was only an illusion. Within 72 hrs later the 1eR22eR Battalion was directed to return again for Sarajevo; but that is another story.

It was obvious during our tour in Sarajevo (Apr 92 - Oct 92) that without the outstanding support provided by the 1eR22eR maintenance platoon, the CANBAT I would not have been able to fulfil its mission with such good results. The professionalism and ability to assume responsibilities acquired during training greatly helped the Electrical and Mechanical Engineering Technicians to make it such a successful mission.

# GREAR BUILDING

by Col Murray C. Johnston

In a touching ceremony on June 28th a Dieppe veteran was the Guest of Honour in a ceremony honouring the memory of one of his friends killed at Dieppe. The ceremony was the opening of the Lance-Corporal Henry William Gear building which was the 3PPCLI Maintenance building and after the Victoria Games will become one of the Base EME workshop buildings.

In 1942 L/Cpl Gear was an armourer in 2 Ordnance Divisional Workshop. He was one of seven armourers from that workshop who participated in the Dieppe Raid on August 19th that year. Their role in the raid was to help with the distribution of ammunition and to help with the wounded. Gear was killed on the shore at Dieppe and is buried in the Canadian Military Cemetery there. He was the first of Canada's Craftsmen to be killed by enemy action on enemy soil during World War Two.

Naming the workshop building in his honour commemorates that sacrifice, inspires to-day's Craftsmen and reminds everybody that Canada's Craftsmen serve by skill and by fighting. It is also appropriate that for the Craftsmen who work in the workshop that it is named after one of their own.

In order to have a ceremony like this you also need sponsors. For that we are indebted to the 3rd Battalion PPCLI, the Base Commander and the Brigade Commander. Lieutenant-Colonel G. Nordick, the Commanding Officer of 3 PPCLI, Captain A. Delamere, the Base Commander, and Brigadier-General B. Ashton, the former Commander of 1 Brigade were thanked for their support by Colonel Murray Johnston, the Colonel Commandant of the EME Branch, who provided an introduction for the ceremony.

Quite often in ceremonies like this, the next of kin are asked to officially open

the building. The search for L/Cpl Gear's next of kin, however, was unsuccessful. So it was appropriate then that Armourer-Artificer-Staff-Sergeant Rodney Crumb who was at Dieppe with L/Cpl Gear should officially open the building. Staff Crumb was another of the seven armourers who participated in the Dieppe Raid. He worked with L/Cpl Gear in preparing ammunition for the raid, was captured at Dieppe and became a Prisoner of War until his escape in early 1945.

It was also fitting that a contingent of EME soldiers from Base EME and 3PPCLI Maintenance Platoon under the command of Warrant Officer W.J. Martyn provided the Guard of Honour for the ceremony. In a short but moving speech in which he recalled that fateful day at Dieppe, Staff-Sergeant Crumb declared the building open in honour of his comrade in arms, Hank Gear, "a war hero, an outstanding Canadian and a loyal Soldier".



**Opening the L/Cpl H.W. Gear Building, the new Base EME Workshop**

Former Armourer-Artificer-Staff-Sergeant Rodney Crumb, a veteran of the Dieppe Raid and a former Prisoner of War, opened the Lance/Corporal William Henry Gear Building recently in Work Point Barracks. Attending the ceremony were Capt(N) A. Delamere, Base Commander; LCol G Nordick, CO 3 PPCLI; Col Murray C. Johnston; and BGen B Ashton, former commander of 1 Brigade.

## An Honour Roll Scroll in the Museum of 11 (Victoria) Service Battalion

by Col Murray C. Johnston

The EME Museum of 11 (Victoria) Service Battalion was recently presented with a copy of the EME Honour Roll Scroll by the Colonel Commandant on behalf of the RCEME Club. When the Honour Roll Scroll was made this spring, a copy was made for each of the four associations related to the EME Branch: the EME Association; the RCEME Association (based in Kingston); the RCEME Association of Alberta (based in Calgary); and the RCEME Club (based on the West Coast).

The Honour Roll Scroll is an alphabetical listing of "Canada's Craftsmen" who gave their lives in the service of Canada or the United Kingdom from 1939 to 1993 while serving in the Engineering Branch of the Royal Canadian Ordnance Corps, the Corps of Royal Canadian

Electrical and Mechanical Engineers, the Corps of Royal Electrical and Mechanical Engineers, the Land Ordnance Engineering Branch, the Land Electrical and Mechanical Engineering Branch or the Electrical and Mechanical Engineering Branch. The list includes 353 names. Unfortunately, the

list does not include those unit armourers and mechanics who have never been identified as having served in either RCEME and/or RCOC. They were "Canada's Craftsmen" all.

### Arte et Marte



Shown in the photograph are some members of the RCEME Club at the presentation (from left to right); Mr. Fred Legg who is also the Chairman of the Vancouver Island Branch of the EME Association, Colonel Murray C. Johnston who is also the Colonel Commandant, Mr. Fred Chess who is also the Curator of the EME Museum of 11 (Victoria) Service Battalion, Mr. Bill Norton, and Mr. Rodney Crumb.

## Captain Kodak, CF Amateur Photographer of the Year

Capt Frost lives and breathes photography. His pictures have been featured in Sentinel and other publications, and this is the second time he has been named CF Photog of the Year. Being on night exercise with Capt Frost around is dangerous, as several blinded EME Officer Phase 2 students discovered several years ago! The students on this course quickly nicknamed him "Captaaaaaaain Kodak", and the end-of-course mess dinner skits included a hilarious portrayal of Capt Frost causing havoc during night exercises with his flash!

Well done!

*Captain Charles Frost was selected as the Canadian Forces Amateur Photographer of the Year for 1993 in the annual CF Photo Contest. BGen Pergat, DGLEM, presents Capt Frost with the plaque to recognize this very significant achievement.*



# THE D-DAY TANK

by Col Murray C. Johnston

**T**his June many Canadians will visit the beaches of Normandy, France. To many it will be a pilgrimage back to D-Day, June 6th, 1944, when they stormed ashore and assaulted Hitler's Atlantic Wall. They left many of their friends here, killed on the beaches or in the fierce battles that followed. Today the area is once again peaceful. The few reminders of the ravages of the fighting and the heroism of the Canadians 50 years ago include the military cemeteries and regimental memorials which are scattered across beaches, sweeping Normandy fields, edges of little towns and country lanes.

There is, however a certain anomaly to all this. In the military cemeteries the graves of the fallen are maintained by the Canadian Government. The regimental memorials, however, were built, paid for and are maintained by the regiments who won the battles and glory for Canada. There is no Canadian national memorial on the beaches as is found at Dieppe. This national anonymity is also reflected in the lack of Canadian visibility in "Le Mémorial; un musée pour la paix" at

Caen, a town which the Canadians liberated. (The Battle of Normandy Foundation was started to privately address this point and the Canadian Government mounted a temporary display there last year.) The nearest thing to a Canadian national monument on the beaches at Normandy is the tank at Courseulles-sur-Mer. But it didn't start out to be that and therein lies a story. It is also a story that is in danger of being lost amid the international hype of 50th anniversary D-Day tours most of which pay scant attention to the Canadian contribution to D-Day.

On that stormy morning 50 years ago the allies landed on five-division front, from right to left Americans at Utah and Omaha, British at Gold, Canadians at Juno and British at Sword. The Canadians, the three infantry brigades of the 3rd Canadian Infantry Division each supported by a tank regiment of the 2nd Canadian Armoured Brigade, landed with two brigades up and one in reserve.

Two squadrons of each of the two leading tank regiments were equipped with specially modified amphibious tanks called Duplex Drive (DD) tanks. Their purpose was to provide direct fire

support to the infantry as they landed on the beaches. The DD tanks were Sherman tanks mounting a 75mm gun. The upper part of the hull had a collapsible canvas skirt which gave it floatation (actually only a couple of feet of freeboard with the commander standing on the hull. This was not a lot in the stormy seas and rising tide in which they were to be launched!). The rear idlers drove propellers which gave the tank way and steerage. The tanks were to be launched with the infantry for the run in. Once the tank touched bottom the skirt was to be collapsed the turret turned around and the first enemy target engaged.

On the Canadian right the 7th Canadian Infantry Brigade and the First Hussars landed opposite La Valette and Courseulles-sur-Mer. The Hussars' A and B squadrons, equipped with DD tanks, "ran in" with the infantry. However, one tank that didn't make it was "ANEMIC" commanded by Lieutenant W.R.C. Little of A Squadron. The tank sank soon after launch but the crew got out.

One of the Hussars who landed that day was Sergeant Leo Garipey of B Squadron. After the war he had returned to France and settled in the area. By 1970 he had become town engineer for Courseulles-sur-Mer. That fall local fishermen snagged their nets on the tank. The salvage company of Jean de Mota floated it to near the low tide mark during successive tide changes. Then, as a patriotic gesture, he relinquished his salvage rights so that the tank could be set up as a First Hussars memorial to the Normandy Landings. The recovery of the tank was completed by a RCME crew made up of mechanics from the Lord Strathcona Horse Maintenance Troop and the Recovery Platoon of Maintenance Company of 4 Service Battalion. At that time both of these units were part of Canadian Forces Europe.



"The Workers". The EME 1994 Bold Team posing in front of their handiwork are (L to R): Cpl Brian Charlebois, MCpl Barry Crowell and WOs Joe Vaillancourt and Pierre Chainé.

The First Hussars raised \$15,000 for the tank's restoration and mounting. However, Garipey renamed it **BOLD** (although **AUDACIEUX** appears in smaller letters below the name). On June 6, 1971 the tank was dedicated as a First Hussars memorial. Soon after this the First Hussars received many requests from various units to put their plaques on the hull of the tank. The turret was to be reserved for the First Hussars crest alone. Soon the hull was festooned on both sides with unit plaques.

However, by then it had become obvious that the Regiment could not support indefinitely the maintenance of the tank as an individual memorial. With the approval of the regiment's association, ownership of the tank was turned over to the town and a large sign installed beside the tank which dedicated it "to the memory of all Canadian units that participated in the D-Day landings".

Vandalism is one of the continuing problems of maintaining the tank. The plaques and crests on the hull are attached by brackets, screws or spot welding. As a result, they are easily and frequently removed. However, "permanent" attachment is possible on the turret. Therefore, for the 40th anniversary of D-Day in 1984, the tradesmen of the Maintenance Troop of the Royal Canadian Dragoons "permanently" attached a First Hussars crest to right side of the turret. To do this they drilled two holes through

the side of the turret. (This is no mean operation since it takes several hours to drill each hole.) Large bolts were then welded to the back of the crest. Then as the bolts were tightened into the holes, liquid metal was applied. The result is a crest permanently bonded to the side of the turret.

At the D-Day ceremonies that year the RCEME representative noted that the unit plaques did not include a RCEME plaque. He reported this to the RCEME Club in Vancouver. The Club, a private veterans organization, had a replica of the RCEME badge cast in bronze. It was sent to Germany in early in 1992. The Materials Technicians of 4 Service Battalion were tasked to mount it on the tank. "Where was the best place to put the RCEME badge?" they asked their mates in the Maintenance Troop of the Eighth Canadian Hussars (Princess Louise's). By this time the rules as to where unit crests could be mounted had been lost, so the answer was, "on the turret where you can bolt and glue it on!" The RCEME badge was subsequently "permanently" attached to the right side of the turret.

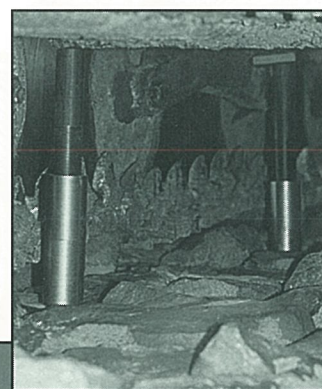
So the RCEME Badge now shares a place of honour on the tank along with the First Hussars badge. It reflects the fact that Captain Proctor, the regiment's RCEME Light Aid Detachment commander, was ashore with his recovery crews

in the first follow-on assault waves and that he was subsequently awarded the Military Cross for recovering many of the regiment's tanks under fire during the Battle of the Rhineland.

In March 1994 a crew of four EME tradesmen from CFE refurbished the tank for the ceremonies on June 6th. They scraped and painted the hull, repaired and shined up all badges even adding one, added "tac" signs and placed permanent supports under the hull. The Mayor of Courseulles-sur-Mer expressed the town's appreciation in a letter to the EME Colonel Commandant.

Today in its newly refurbished livery the tank continues to be a proud memorial to the Canadian soldiers who stormed these beaches 50 years ago. Their sacrifice has bought us peace.

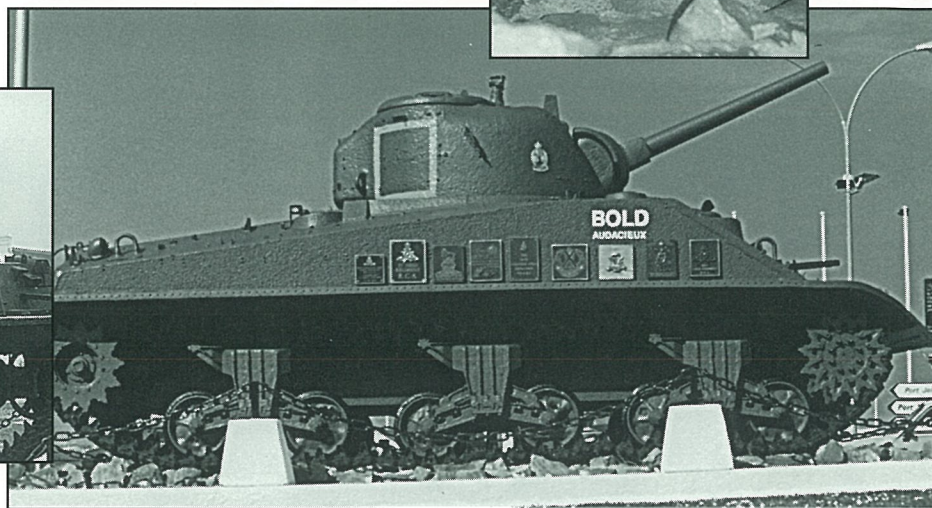
However, who will maintain this tank as a fitting memorial to the soldiers who landed on D-Day?



*Braces under the tank hull.*



*Cpl Charlebois and WO Chainé painting.*



*The finished product!*

# THE BIG HISTORY OF A LITTLE ARV KEY

By Capt J.R. Côté

In the EME museum in CFB Borden you can now see displayed, inside a maple leaf-shaped plaque, the key to the first Armoured Recovery Vehicle which was delivered by the Germans to the Canadians back in 1978. It's a small artifact which, although interesting, would not deserve to be mentioned here if it wasn't for the unusual way in which it found its way there; but we will let the key tell its own story...

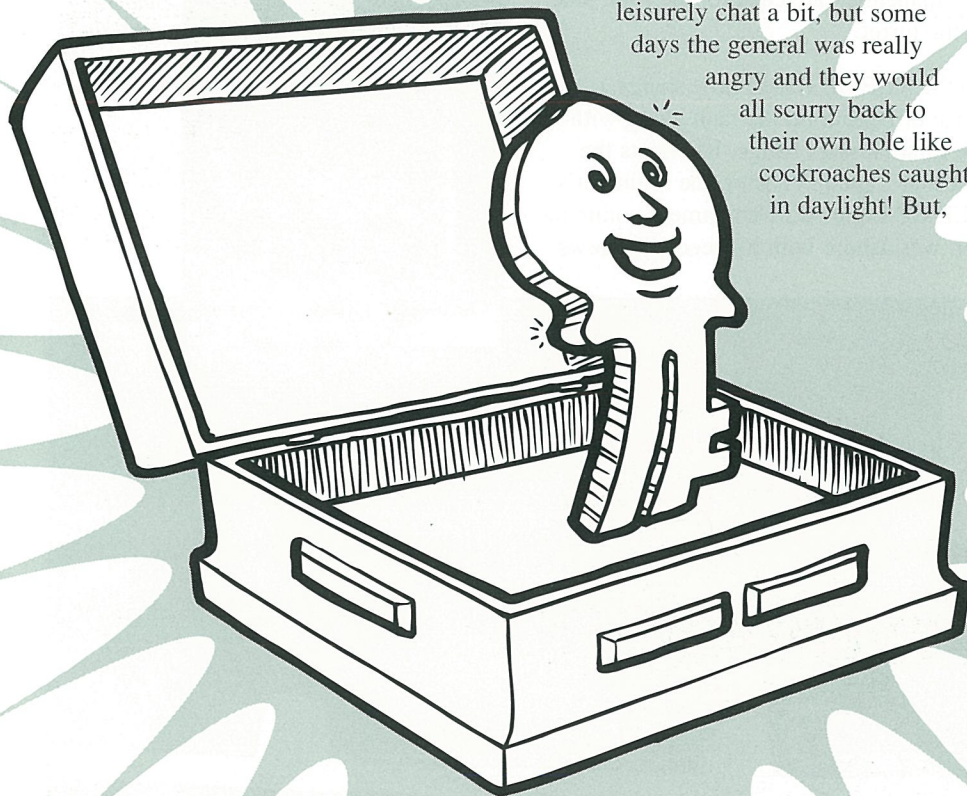
"It all started one day when from a little piece of metal I was cut into a small key. I was told I would be in command of a powerful beast, a battlefield workhorse, the pride of my masters, but I never got to start the ARV. You see I was unique, one of a kind, the first in my class. So instead they put me in a little cardboard box with a notice and exchanged me to a General (Major-General Bélzile I

believe) for a bundle of money. Because of the money involved, I was led to believe that I was quite important, but I soon realized otherwise; the General threw me back to this other guy who followed him everywhere like a dog and after looking at me with despire, he locked me up in his suitcase. They never looked at me again for the rest of the trip."

"When we arrived at my first home, CFE Headquarters, they exposed me in a display cabinet cluttered with a bunch of other plaques, gizmos, and various inanimate objects. It wasn't too bad because I had a window spot and could see what happened in the corridors of the HQ; most of the time nothing, really. These staff officers, some called them staff weenies, had a strange way of life. They walked briskly from hole to hole with full mugs of coffee, always worried and waving stacks of papers. Most days it was calm and they would meet in the corridor and at doorsteps to leisurely chat a bit, but some days the general was really angry and they would all scurry back to their own hole like cockroaches caught in daylight! But,

anyway, one day I noticed a big change because there were fewer staff officers, and those left were really working: they carried chairs and filling cabinets. We were moving! When it came to my cabinet, the guy opened it up and looked at us with a puzzled face as if he didn't know what to do with us. Then his face lit up and he gathered me and my friends into a postal bag. He threw us in the big bin with all the other green postal bags. We didn't know where we were going but the bin was really stinky. Along comes this guy who rips open all the bags looking for something to salvage; he must have known that the "staffers" were packing carelessly. Anyway, this Veh Tech corporal, Charlebois I think was his name, finds me and I can see on his face that I mean something to him, so he brings me to my new home."

"The next few days were a little hectic and a lot of people looked at me and talked about me. I knew I was in the hands of caring people because they built me a nice maple leaf-shaped bed with a comfortable red felt inset. Then they presented me to the big boss, a Lieutenant-Colonel who was CFB Lahr's BTSO. He brought me on his next trip to Canada and I felt he was really happy to have me. He was going to one of those strange gatherings where stones are thrown back and forth over ice. When the playing was done, he proudly presented me to another Colonel who must have been the curator of the museum because that's where he finally brought me. Now I'm comfortably displayed amongst other nice and proud objects of the past in a museum dedicated to the memory of those same nice and caring people that found me and who are called 'maintainers'."



# EME GOES UNDERGROUND!

by MCpl K. Baltzer

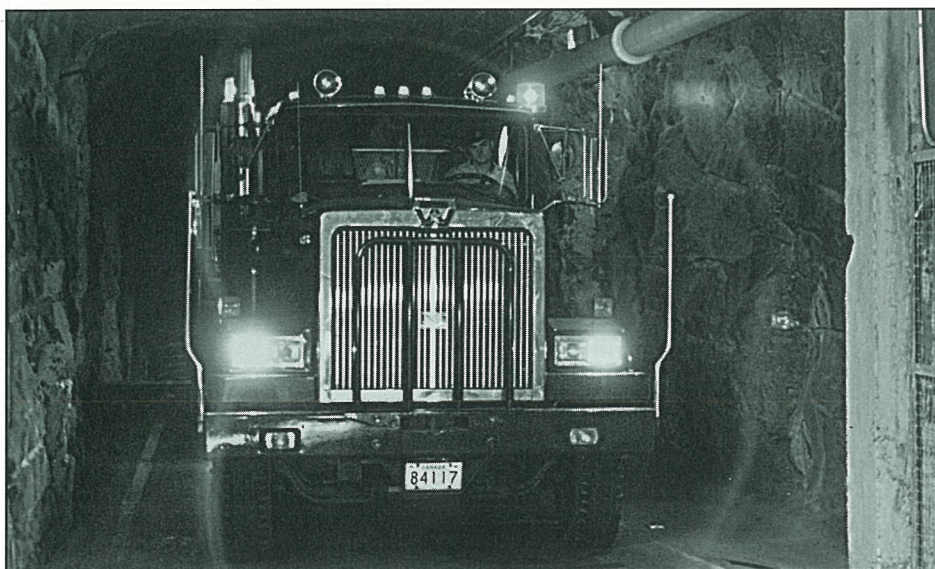
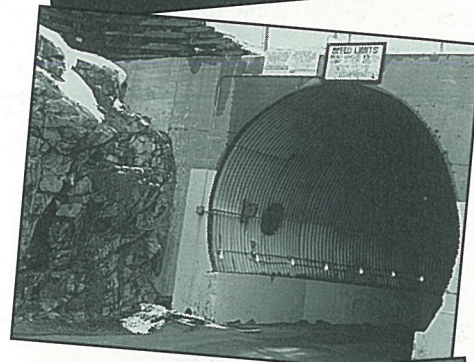
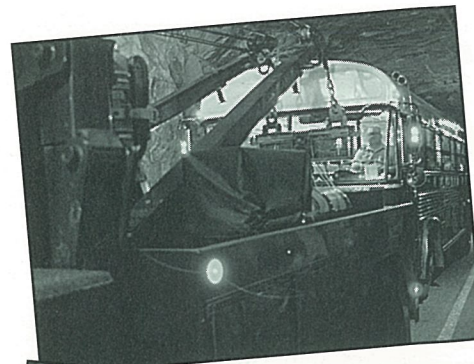
22 Wing, or CFB North Bay, houses what is known as the R.O.C.C. (Regional Operations Control Centre), the only underground complex in Canada. The complex has been in operation since the early sixties. Base Maintenance is responsible for maintaining and recovering R.O.C.C. support equipment.

Upon entering the R.O.C.C. you are required to report to the MP Guard House to receive your R.O.C.C. security pass. Proper identification is required as security is a high priority here. There are two entrances to the R.O.C.C. Complex, known as the North and South Portals. The North Portal has a 10% slope and is 2 km long. The South is only 1 km long and also has a 10% slope. Once you board the special R.O.C.C. bus the escapade begins; you pass through the automatic doors and then all you see is a stream of lights, and walls of solid rock from top to bottom, and all you hear is the driver slowing down the bus by pressing the air brakes on and off. When you finally reach the main audit at the bottom of the tunnel you are 600 feet below the surface.

Base Maintenance is equipped with a 1989 Western Star Wrecker (a top-of-the-line highway cruiser); this vehicle is equipped to do the job that it is required to do. The wrecker stands 11 feet high and 9 feet wide so we can only use the south portal to enter, as the north portal entrance does not have enough clearance.

Upon receiving a recovery call in the R.O.C.C. all traffic is brought to a stop. If the casualty is in the main audit the recovery is relatively easy; however, if the casualty is north or south of the audit then the job gets to be interesting. We try to get the casualty operational enough to return to the surface safely on its own. If this is not possible then we must back up the wrecker to the casualty then drag it to the surface, keeping in mind we only have inches to play with and the tunnel is 3 km long.

Doing this type of recovery is unlike any other. Most of us have never experienced this very challenging and demanding task. A lot of people don't even like driving a wrecker near a median with a casualty on the hook. So if you want to improve your backing and tight driving skills, try a 3 km underground tunnel!



*Backing down the South portal.*

*TOP: The wrecker preparing to hook up to a 40 pax bus.*

*MIDDLE: The entrance to the North portal.*

*BOTTOM: A view of the ROCC tunnel.*

# Helicopter Recovery Made Easy

By Capt J.D. Bower

On 17 March 1994, a Kiowa helicopter from 2 Wing was performing 'Auto-Rotation' manoeuvres over the airfield at CFB Toronto, simulating an engine failure. A mis-calculation by the pilot resulted in a very hard landing. Fortunately, the two passengers escaped serious injury as the craft came to rest on its

skids, but the helicopter was a write-off. The crash site was secured by the Base Auxiliary Security Force (formerly Base Defence Force) until the appropriate authorities from NDHQ had investigated the crash. When the crash site was finally examined, the helicopter had to be moved from the site to one of the hangars so technicians could inspect it in more detail. However, how to move the helicopter? Base Transport could have

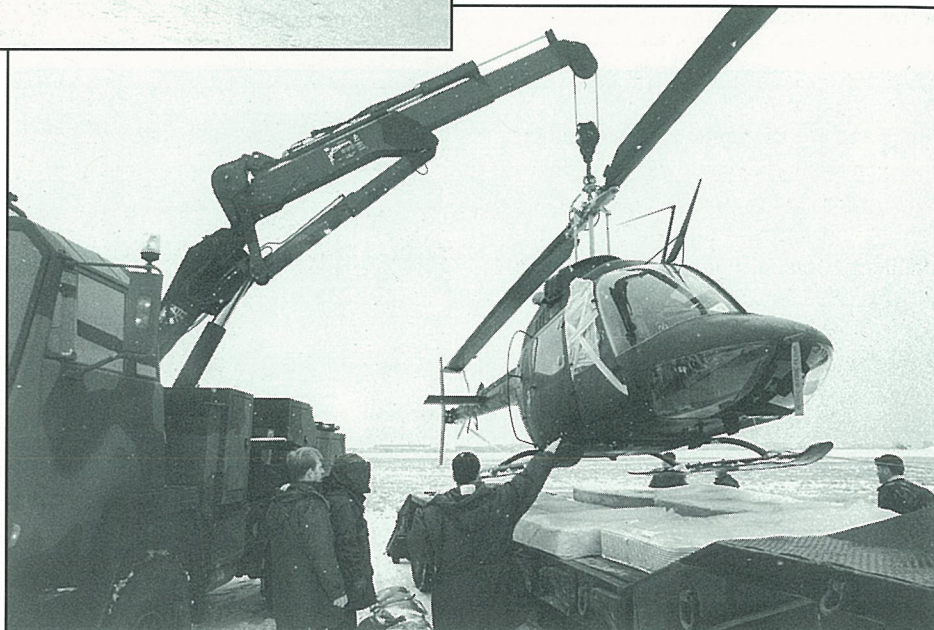
rented the lift capability, but at a cost of \$300 an hour with a 3 hour minimum! Thanks to Base Maintenance Toronto, another solution was more practical and economical.

The plan was to use an HLVW wrecker to lift the helicopter off the ground while Base Transport would use a low-bed trailer and back it under the casualty. With the helicopter an estimated 2300 lbs, there was little question that the HLVW could perform the lift. The Base Maintenance Toronto Recovery Team, consisting of Sgt Mike Nobrega and Cpl Richard Cormier, were quite certain that this could be performed easily with such great equipment. 2 Wing prepared the helicopter by placing the appropriate equipment on top of the rotors.

The HLVW performed the task flawlessly. Once the helicopter was secured to the flat-bed, the helicopter was moved to the hangar for further investigation. Oh, for the days when EME used to maintain these things too!



Sgt Nobrega and Cpl Cormier receive the casualty before performing the lift.



Helicopter recovery made easy! CFTO to follow.

# EME SQUADRON TO THE RESCUE!

by WO JRC Desjardins,  
Veh Maint WO

**T**his story started sometime last year when Mr Harry Martin, Curator of the Canadian War Museum, asked CFB Ottawa EME Sqn if we could help start two old British armoured vehicles required for a parade. The news of this tasking flashed through the Sqn like wild fire. People lined up just for the challenge and the chance to show off their expertise, not to mention the opportunity to see these vehicles in action.

During our visit to the museum warehouse we noticed a number of antique vehicles, in conditions ranging from excellent to disastrous. So, the question among the technicians was "Could EME take on the task to rebuild one of these vehicles?" After numerous memos and discussions, EME Sqn was able to get "the ball" rolling.

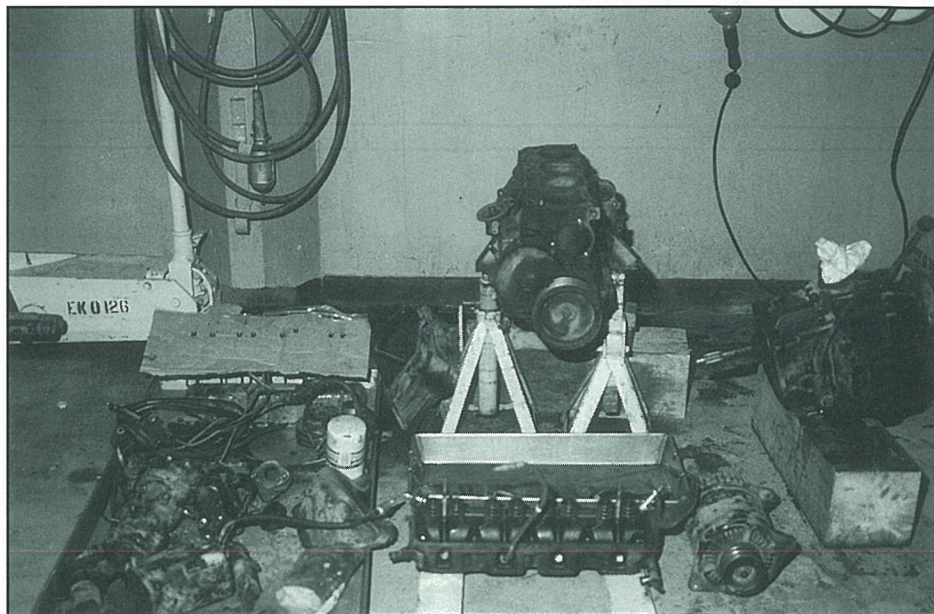
On March 31, 1994, with the help of SPV sect, we picked up an old 1974 M 15 1 A2 jeep. For those of you unfamiliar with this jeep, it was in service with the US Army during the Vietnam War, and in the Canadian Forces inventory for about 10 years. On April 5 a group of volunteer technicians, including supply techs and clerks, began to disassemble the jeep during their lunch hour. Now that's when the fun began. It's easy to take things apart, but in this case, the challenge was to return the vehicle to a fully serviceable condition and as close to the original state as humanly possible. After only four days the jeep was totally in pieces. The question was: WHERE DO WE GET REPLACEMENT PARTS? The search started.

After some time, we finally found a complete M151 jeep parked in LETE'S back compound. This alternate vehicle was just what was needed for replacement parts. Some negotiating was

required through the Chief's net to ensure that the Jeep move in our backyard. Still, this was not enough. For a complete restoration job, this jeep required new gaskets and seals, none of which had been fabricated since 1988. But a good EME tech is never down. The search continued and, after numerous telephone calls to the original

manufacturers in the US, our much-needed parts were found.

At the present time engine parts are being inspected and repaired, the jeep's body is slowly being done, and parts are being sand-blasted and painted. Things are gradually taking shape with an anticipated completion in late Jan 95.



*Where does it all go? The engine is rebuilt.*



*Feverish activity surrounds the jeep.*

# SOFLAM CHALLENGE

by WO Rick Lacerte,  
CD MTD FCS WO

**O**n Jan 18 1994, a high priority tasking was directed to MTD-6 (Maintenance Techniques Division - Fire Control Systems) for evaluation. We were plunged into the high tech world of Star Wars.

DLR had determined the requirement for a LASER target designator for UN operations in Yugoslavia and the SOFLAM (Special Operations Forces LASER Marker) was chosen to address this requirement. A night fighting

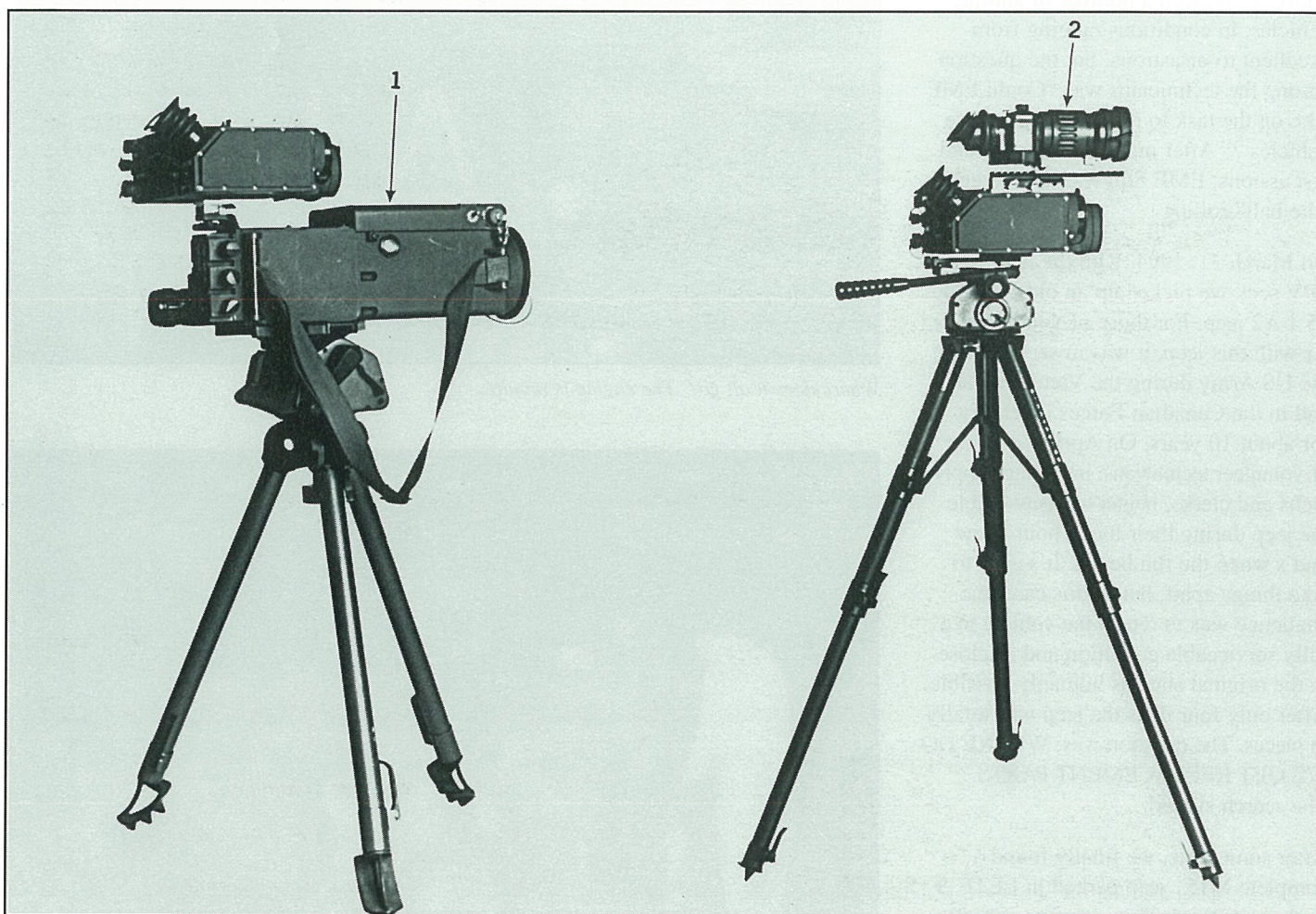
capability requirement had also been identified and it was decided that the CF in service night vision equipment would fulfil their role.

For our Readers, the LASER Marker AN/PEQ- 1 also referred to as SOFLAM is a man portable LASER marker and rangefinder that, once aimed at a target, may be remotely fired to mark the target for laser guided bombs from fighter bombers. Once a target has been locked on by the operator, the fighter bomber will detect, track the target and drop a laser guided bomb that will seek the marked target. Is this hot stuff or not?

Without going into full details, the tasking involved the development and manufacture of a qty of 11 battery pack assemblies, vehicle cables and mounting kits to provide the SOFLAM with night fighting capabilities. In fact, three different set-ups were going to emerge from this project.

From Jan 28 to Feb 28, three teams of technicians designed and manufactured the battery packs and the vehicle cables. The teams involved were comprised of:

- FCS Contractors Mr Coughlin and Mr Williams who worked on the design and assembly of the units.



**SOFLAM configurations:**

1 - SOFLAM Mounted on NODLR

2 - AN/PVS-505 Mounted on SOFLAM

- Mat Techs MCpl Styres and Cpl Juillette who designed and manufactured the 11 battery bags.
- Mechanical Fabrication Section Pers Mr Avery and Mr Robinson who manufactured a qty of 11 battery holding plate assemblies.

Due to different reasons such as manufacturing delays and, believe it or not, delays at the Canadian/US border, the first SOFLAM arrived at LETE on March 3. Despite the preparations and contingency planning, 3 days before the arrival of the SOFLAM we learned by surprise that the SOFLAM was not to be modified!

As soon as the SOFLAM touched the ground at LETE, a team of 4 machinists (Mr Blackwell, Mr DeGooyer, Mr Hogan and Mr Dimillo) under the supervision of WO Ramsay accomplished from rough sketching (No time for fancy drawings) the design and production of all the necessary mounting kits required to mount the SOFLAM onto the NODLR and/or mount one set of AN/PVS-503 or AN/PVS-505 onto the SOFLAM.

After a total of approximately 400 man-hours, 50 hours of overtime, the direct involvement of 13 technicians, a photo session by Mr Minter, a lithium

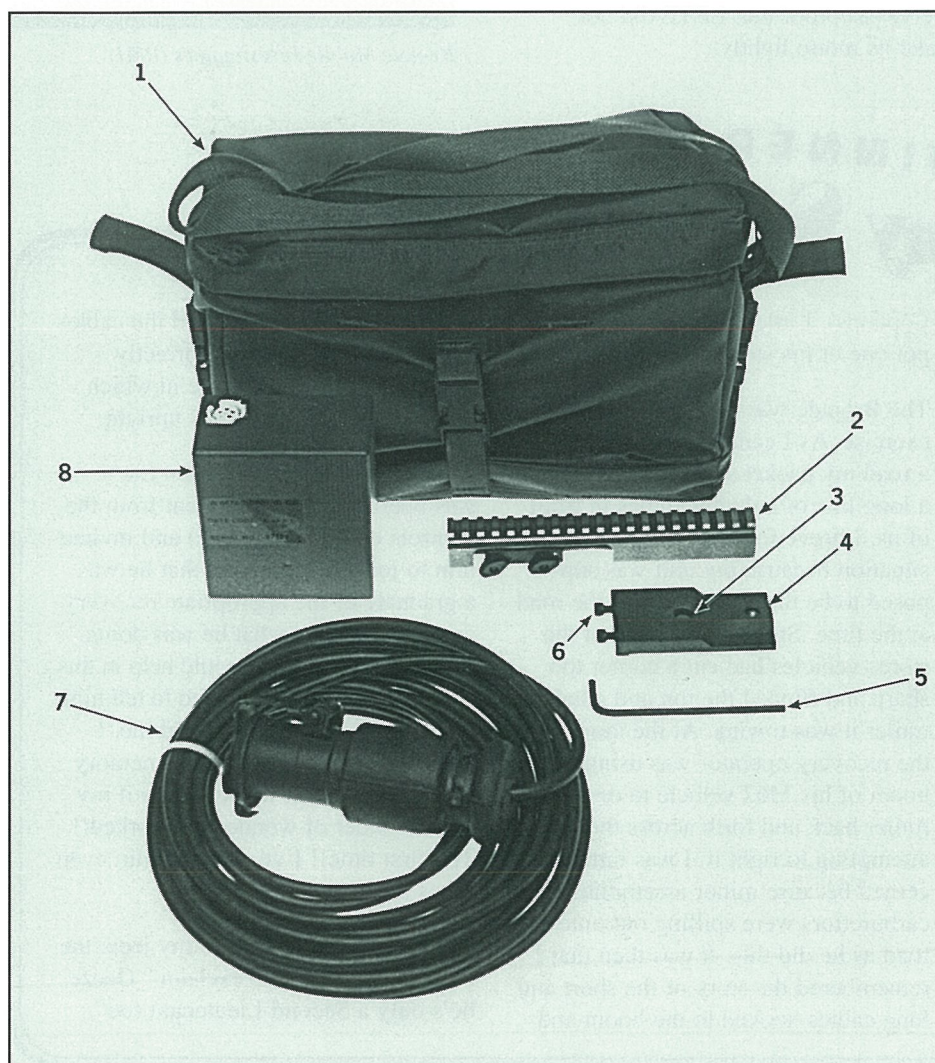
battery density and heat study, an installation instruction, hours on the phone to get special order parts, two major unscheduled engineering changes at the last minute (normally on a Friday) and a bunch of headaches, the merchandise was ready to be delivered on March

As you can see, a great deal of teamwork, cooperation and Esprit de Corps was displayed by all members involved in the completion of this very special task. The exceptional product delivered in such a very short time would not be, if it wasn't for the innovation, ingenuity and technical expertise displayed by LETE technicians.

With its new operating configuration, the SOFLAM can be operated at night with a range of at least 5 km under all weather conditions, three different set-ups can be selected by the operator and the battery pack can provide power for two hours of continuous firing.

So if you hear on late night news about NATO Fighter Bombers dropping LASER guided ordnance on enemy territory, then think about us!

**Arte et Marte**



#### **SOFLAM Mounting Kit**

1. Battery Bag
2. Mounting Rail for Night Sights
3. SOFLAM Mounting Hole
4. NODLR Mounting Hole
5. Allen Wrench
6. Mounting Screws
7. Vehicle Cable
8. Lithium Battery

## EXCELLENCE IN ENGINEERING

by Capt P.R. Shearing, DLAEEM 4-3-3

LETE has once again proved their engineering excellence. The CF's aging fleet of Remote Mobile Investigators (RMI), a remotely-operated vehicle for dealing with explosive ordnance, has been plagued with problems due to the bulky control cable. The old cable becomes snagged easily and the sheer weight of its copper core actually limits the operable range. The decision was made to develop a fibre-optic command and control link, something that was not available on the market when the RMI was built. The result was unveiled this summer: a fibre optic link that includes an automatic payout/takeup system, which allows the EOD technician to

concentrate fully on the task at hand. The system came with added benefits: the range was increased by a factor of three; the battery life was increased; and it is possible to operate more EOD devices concurrently due to the increased data capacity of the fibre-optic link. The quality of engineering delivered by LETE was immediately apparent from the enquiries and interest from commercial manufacturers and other users of EOD equipment. Field trials were held, and the new command and control link easily obtained high marks in all categories. The system will be installed on the fleet of RMIs starting this summer. This quality of engineering service serves as proof that LETE did not take its motto lightly.



Remote Mobile Investigators (RMI)

## WINNER OF THE Funny Story Contest

### "OLD SKILLS NEVER DIE"

GJD Townend DPSRM 2-6-2

Capt (Retd)

RCOC/Logistics Branch

In 1963, I was a young Second Lieutenant serving in 4CIBG, Germany as the OIC Admin Platoon, 4 Ordnance Field Park. The senior mechanic was Cpl Gerry Gannon. The unit was co-located in Fort Chambly with 4 Field Workshop and 1 Transport Coy RCASC.

Capt AJ (Andy) Rostaing was the OIC Spare Parts Store Section attached to 4 Fd Wksp from 4 OFP. During the Second World War, he had been a RCEME recovery operator in Sicily and Italy with 1 Cdn Division and I enjoyed the many "how to" stories he told of recovering equipments (All junior officers enjoy listening to senior

Captains). Little did I know I would put one of his stories to use.

The Brigade was deploying on the fall exercise. As I came around the bend in a road my packet stopped. There was a long line of halted vehicles in front of us. I drove forward to ascertain the situation because my unit was supposed to be the only serial on the road at the time. Sure enough, one of the stores vehicles had cut a corner too sharp and flipped the ton and a half trailer it was towing. At the moment, the recovery operator was using the boom of his M62 vehicle to drag the trailer back and forth across the road, attempting to right it. I was rather concerned because minor assemblies like carburettors were spilling out onto the road as he did this. It was then that I remembered the story of the short and long cables hooked to the boom and

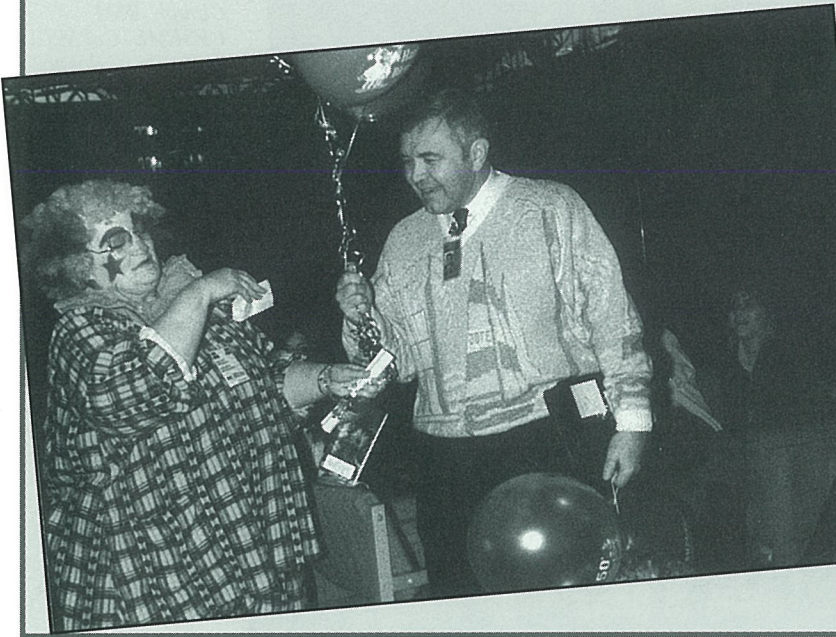
how as the boom was raised the cables took up the strain and if correctly positioned formed a cradle in which the trailer could rock itself upright.

I got the Corporal's attention (he was operating the equipment from the controls on the boom side) and invited him to join me. I learned that he was a graduate of the appropriate recovery course and knew what he was doing. I then suggested that I could help in this recovery task and proceeded to tell him what Andy Rostaing had told me. I could see a faint glimmer of memory in his eyes and he agreed to do it my way. Wonder of wonders, it worked!! The first time!! I've got to admit, even I was surprised.

As I was walking back to my jeep, the corporal was heard to exclaim "Geeze, he's only a Second Lieutenant too".

## A TRADITIONAL CELEBRATION WHEN YOU ARE 50 YEARS OLD

DGLEM is presented with his birthday cake and card for his 50th birthday by one of his best staff officers! Happy birthday, sir!



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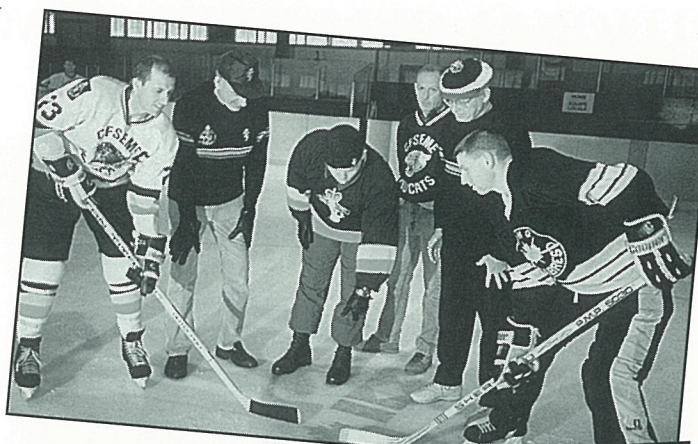


# 50TH ANNIVERSARY HOCKEY TOURNAMENT

The 50th Anniversary EME Hockey Tournament was held from the 7 to the 10 December 1994 at CFB Borden. The planning and preparation for these four days is the result of the dedication and talents of a large number of individuals. The action displayed by the competing team was exciting. Here are some of the pictures taken from the different presentation.

## Table of participating teams:

CFSEME "A"	Chatham
B Maint Borden	CFSEME "B"
CFSEME "C"	BEME Ottawa
DGLEM	Petawawa
Kingston	CFSEME "D"
Montréal	Meaford
Gagetown	Valcartier



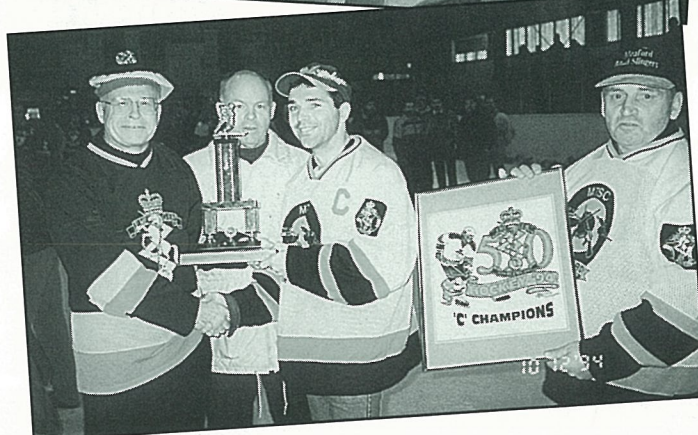
Opening face Off:  
(left to right)  
Capt Dave Barton -  
CFSEME "A" Team  
Captain, CWO A.E.  
Rest Branch CWO,  
LCol D.W. Clarke  
Commandant  
CFSEME, CWO GM  
Clough RSM  
CFSEME, Col M.C.  
Johnston Colonel  
Commandant, and  
Capt Keys Cullen  
DGLEM Team  
Captain.



"A" Cup Champion:  
LCol D.W. Clarke,  
Col M.C. Johnston,  
Sgt Ethier CFB  
Valcartier Team  
Captain.



"B" Cup Champion:  
LCol D.W. Clarke,  
CWO GM Clough,  
and MWO Knowles  
Chatham Team  
Captain .



"C" Cup Champion:  
Col M.C. Johnston,  
LCol D.W. Clarke,  
MTSC Meaford  
Sgt R. Gilbert Team  
Captain, and MWO  
Davidson.



## Champlain's Astrolabe

In 1992 the Royal Electrical and Mechanical Engineering Corps celebrated their 50th Anniversary. As part of their celebrations they conducted Exercise Master Craftsman, an incredible journey from England to British Columbia and back by sail, canoe, hiking and even skydiving. During this trip, they carried a talisman for presentation to the Canadian EME Branch, and we, in turn, presented them with a talisman for return to England.

The talisman chosen was a copy of Champlain's astrolabe. The astrolabe was a navigational device that Samuel de Champlain had lost in 1613 while travelling up the Ottawa River. It was found by a farm boy named Edward Lee in 1867 at the current site of Logos Land, a theme park near Renfrew, and eventually made it into the collection of the Canadian Museum of Civilization. The original was loaned to 202 Workshop to help them in construction of two

replicas; the first for REME, and the second for presentation to the museum. The replicas are distinguishable from the original by being a slightly different size and by having a "replica" stamp.

The loop was closed in our 50th Anniversary year of 1994 when the replica of Samuel de Champlain's astrolabe was presented to the Chief of History of the Museum of Civilization.



*Dr. Daniel Gallacher, Chief of History of the Canadian Museum of Civilization, receives the replica of Champlain's astrolabe from DGLEM, BGen Pergat, and DLES, Col Nault.*



to each hole. However, by using the Calloway low net method Phil did come out the winner. Congratulations Phil.

Upon completion of the awards presentation, the esteemed group

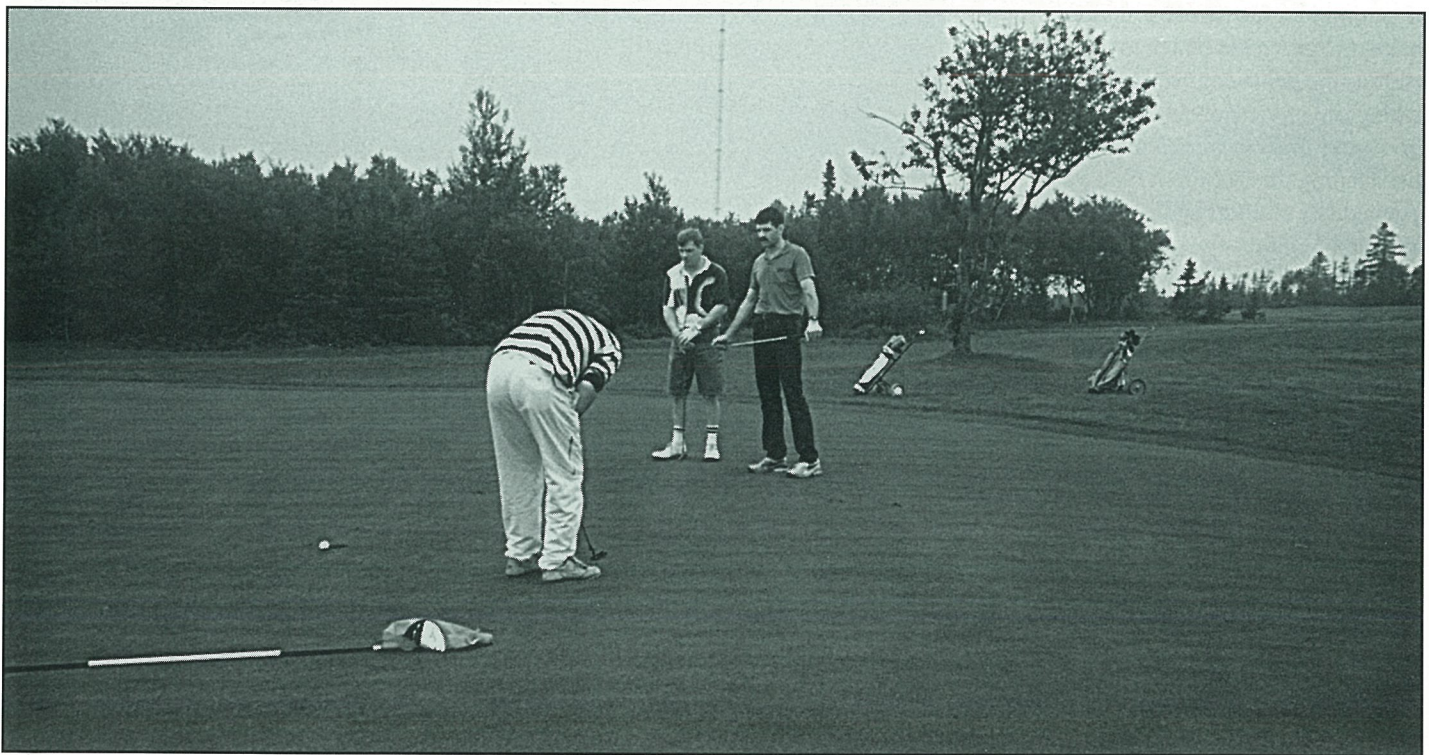
went off on their way with the satisfaction of playing a most challenging day of golf. Overall, a good time was had by all and it was a nice way to end the EME 50th Anniversary celebrations in Atlantic Canada.

Of course no event such as this ever ends successfully without the efforts of a good organizing committee dedicated to the task at hand. The people who made the golf tournament a success were MWO Steve Rideout (organizer extraordinaire!); MCpl Brian Parker (scrounger extraordinaire and provider of prizes); MCpl Tammy Reed and Mrs. "Babs" Berger (partners in crime and fixers of loose ends!), Mr. Basil Petitpas (photographer extraordinaire); and of course Capt Tony Russell (Ret'd) who did much work on getting the whole thing together before he left to work with Golf - Volkswagen Golfs that is!

Again many thanks to the participants and organizers for a great day of golf and fun. Arte et Marte!



*(L-R) MS Arnold (BEME Halifax), LCol Morrison (G4 LFAA), and MWO Morris (Gagetown) preparing for an exciting day of golf in the fog.*



*MCpl Saunders (BEME Halifax) misses while (L) Cpl Banfield (Gagetown) and (R) WO Steve Doherty (12 Wing EME Sqn) wonder if he'll ever sink it.*

The Electrical and Mechanical Engineering Branch history

# CANADA'S CRAFTSMEN

at 50!

**1994** marks the 50<sup>th</sup> Anniversary of the formation of the Corps of RCME during World War II. Since then, RCME, LORE, LEME and now EME have provided outstanding service support to the Canadian Forces in peace and in war. The complete history, up to and including the recent Peace Keeping Operations, the Rebadging, and the 50th Anniversary celebrations, will soon be available in the updated "Canada's Craftsmen at 50". The pre-publication price is only \$14.99 for soft cover and \$24.99 for hard cover.

Now is the time to reserve your copy of the story of how Canada's Craftsmen have supported the Canadian Forces "by Skill and by Fighting"! This special price is available only during 1994; prices in 1995 will be higher. Delivery of the book will be in late 1995. For additional information, please contact the Staff Officer EME at 819-997-7270.

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Please make cheque or money order payable to  
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Total = \_\_\_\_\_

# Accreditation of the EME Occupations by The Canadian Council of Technicians and Technologists (CCTT) – Update

by Capt D. Bennett, DLES 3-4-2

All EME personnel should be aware of the CF accreditation and certification program through the article contained in the EME Journal 3/94. The intent of this article is to summarize the contents of the letter forwarded to the Commands with respect to the results of the accreditation review conducted by the Canadian Council of Technicians and Technologists (CCTT).

The CCTT is a national board which develops and monitors Technician and Technologist Standards for the provincial technical societies such as the Ontario Association of Certified Engineering Technicians and Technologists (OACETT). The CCTT completed its accreditation study of all EME occupations by thoroughly reviewing all facets of training at CFSEME (less OSQ's). The CCTT performs the accreditation reviews by appointing a sub committee, the Canadian Technical Accreditation Board (CTAB). The CTAB submitted its recommendations to the CCTT and to NDHQ/DPPS. After staffing through NDHQ and the Commands, EME Branch concurrence was passed to CCTT by DPPS. At a meeting of the CCTT held 25 November 1994, the recommendations of the CTAB were accepted by CCTT; those recommendations represent a significant step forward for the EME Branch and are summarized at the end of this article.

By now, the provincial societies are aware of the recommendations of the CTAB and are in a position to deal with applications for membership or certification from military personnel in a simplified manner. While the process may vary from province to province, proof of current qualifications will be required. The Personal Record Resume (CF 490)

or copies of qualification certificates may be all that are required; however, the provincial society should be consulted to determine what documents are to be submitted. Additionally, personnel are encouraged to submit proof for other forms of qualification to be considered, including academic records or other qualifications that may relate to the discipline in which certification is being sought. Although OSQ's were not reviewed by the CTAB, it may be worthwhile to submit records relating to such qualifications for consideration. In this instance, a copy of the course report which may indicate the technology areas covered in the course or a copy of the training plan, if available, would be an asset.

For those personnel wishing to complete courses toward technician or technologist certification, the provincial society or Base Personnel Selection Officer (PSO) should be consulted. They can advise which colleges in the area can provide the training to CCTT standards. Some colleges such as Fanshawe College in London, Ontario and Southern Alberta Institute of Technology (SAIT) in Calgary, Alberta offer many of the pertinent courses by correspondence. The colleges that are part of the CF Community College Network (CFCCN) can also provide assistance. A list of these colleges may be obtained from the Base PSO.

To ensure that all EME technicians are aware of these latest developments and in light of the FRP program, it is urged that you ensure prompt dissemination of this information. Questions should be directed to the Base PSO or to the Branch Coordinator, Captain D Bennett, DLES 3-4-2, (819) 997-9521 or by FAX (819) 994-8710.

## SUMMARY OF CCTT ACCREDITATION EVALUATION RESULTS FOR EME BRANCH MOCs (411, 421, 431, 432, 433, 435, 441)

### MOC 411 – VEHICLE TECHNICIAN

QL	CCTT GRANTED QUALIFICATION (and/or subject credits required to obtain CCTT qualification)
7	<b>Mechanical/Industrial Technician</b>  May re-classify to Technologist by completing 9 subject credits from either the Mechanical or Industrial disciplines, but not from both. Such credits MUST include Advanced Mathematics and MUST NOT include Management subjects. At least 6 of the credits MUST be at the highest level of study (C2).
6A	Qualified to enter an examination program requiring 3 subjects for certification as a Technician (C. Tech). Such credits MUST be from the "Discipline Related Competencies" of either the Mechanical or Industrial standards, but not from both, and MUST NOT include Electro-Technology, Mechanics, Hydraulics and Pneumatics or Industrial Health and Safety.
5	Qualified to enter an examination program requiring 6 subjects for certification as a Technician (C. Tech). Such credits MUST be from the "Discipline-Related Competencies" of either the Mechanical or Industrial Standards, but not from both, and MUST NOT include Electro-Technology or Industrial Health and Safety.

**MOC 421 – WEAPONS TECHNICIAN**

<b>QL</b>	<b>CCTT QUALIFICATION GRANTED</b> (and/or subject credits required to obtain CCTT qualification)
<b>7</b>	<b>Mechanical/Industrial Technician</b> May re-classify to Technologist by completing 9 subject credits from either the Mechanical or Industrial disciplines, but not from both. Such credits <b>MUST</b> include Advanced Mathematics and <b>MUST NOT</b> include Management subjects. At least 6 of the credits <b>MUST</b> be at the highest level of study (C2).
<b>6A</b>	Qualified to enter an examination program requiring 3 subjects for certification as a Technician (C. Tech). Such credits <b>MUST</b> be from the "Discipline Related Competencies" of either the Mechanical or Industrial standards, but not from both, and <b>MUST NOT</b> include Machine Shop Practices or Hydraulics and Pneumatics.
<b>5</b>	Qualified to enter an examination program requiring 6 subjects for certification as a Technician (C. Tech). Such credits <b>MUST</b> be from the "Discipline-Related Competencies" of either the Mechanical or Industrial Standards, but not from both, and <b>MUST NOT</b> include Machine Shop Practices.

**MOCS 431, 432, 433, 435 – FIRE CONTROL TECHNICIAN**

<b>QL</b>	<b>CCTT QUALIFICATION GRANTED</b> (and/or subject credits required to obtain CCTT qualification)
<b>7</b>	<b>Electronics Technician</b> May re-classify to Technologist by completing the following courses: GC-2 Mathematics (A111) Electron DS-5 AC Circuits (B201 component) Electron DS-10 Electronic Mathematics Electron DSO-1 Computer Control Systems (E301) Electron DSO-2 Control Systems (E303)
<b>6</b>	<b>Electronics Technician</b> May re-classify to Technologist by completing the following courses: GC-2 Mathematics (A111) GC-3 Management Principles Electron DS-5 AC Circuits (B201 component) Electron DS-8 Pulse and Digital Circuits Electron DS-10 Electronic Mathematics Electron DSO-1 Computer Control Systems (E301) Electron DSO-2 Control Systems (E303)
<b>5</b>	May classify to Technician by completing the following courses: GC-2 Mathematics (A111 component minimum) Electron DS-5 AC Circuits (B201 component)

**MOC 441 – MATERIALS TECHNICIAN**

<b>QL</b>	<b>CCTT QUALIFICATION GRANTED</b> (and/or subject credits required to obtain CCTT qualification)
<b>7</b>	<b>Mechanical/Industrial Technician</b> May re-classify to Technologist by completing 9 subject credits from either the Mechanical or Industrial disciplines, but not from both. Such credits <b>MUST</b> include Advanced Mathematics and <b>MUST NOT</b> include Management subjects. At least 6 of the credits <b>MUST</b> be at the highest level of study (C2).
<b>6A</b>	Qualified to enter an examination program requiring 3 subjects for certification as a Technician (C. Tech). Such credits <b>MUST</b> be from the "Discipline Related Competencies" of either the Mechanical or Industrial standards, but not from both, and <b>MUST NOT</b> include Materials Technology, Machine Shop Practices or Manufacturing Processes.
<b>5</b>	Qualified to enter an examination program requiring 6 subjects for certification as a Technician (C. Tech). Such credits <b>MUST</b> be from the "Discipline-Related Competencies" of either the Mechanical or Industrial Standards, but not from both, and <b>MUST NOT</b> include Machine Shop Practices or Manufacturing Processes.



# EME News...

**EME Bonspiel.** The different EME Bonspiels will be or will have been held during the dates indicated below:

Western Area: Cold Lake from  
17 to 20 February 1995;

Central Area: Petawawa from  
2 to 5 March 1995; and

Atlantic Area: Gagetown from  
23 to 26 March 1995.



**Order of Military Merit.** His Excellency the Governor General of Canada has appointed 54 members of the Canadian Forces, both regular and reserve, to the Order of Military Merit. Four of these new members from the EME Branch are:

Commander: LGen R.N. Fischer  
NDHQ Ottawa Sr  
ADM(Mat);

Members: CWO P.A. Barker 2  
Service Battalion;  
CWO W. Devlin NDHQ  
Ottawa -  
DGLEM/DLES  
CWO J.J.B. Dionne 5  
Service Battalion.

Congratulations to all. The investiture ceremony will be held in Spring 95.



**DGLEM Award.** The DGLEM Award has been superseded by the EME Branch Advisor Merit Award. Only EME organizations or members are eligible for this award. CFSEME was awarded the first EME Branch Advisor Merit Award for 1994. The quotation is as follows: "In recognition of outstanding and continuous support to the EME Branch specifically during the activities and preparations leading to the celebrations of the RCEME 50th Anniversary".

**Glen Benoit Award.** This award, in honour of an FCS tech killed while working on a Leopard tank was presented annually in CFE to the best Craftsman. The award was transferred from CFE to Petawawa, 2 Service Battalion is still searching for this award as they are processing the material from CFE. Hopefully the award will be found so as to continue its presentation.



**Canada's Craftsmen at 50!** As determined by the results of the recent survey, the front cover of "Canada's Craftsmen at 50!" will illustrate the monument instead of the Iltis under fire. The pre-publication price is still effective until June 30, 1995.



**EME Strategic Plan.** An EME Strategic Plan will be produced in the near future to take into account the Land Maintenance System and the interest of the Branch.



**All-Ranks Branch Fund.** If the necessary interest exists, an All-Ranks Branch Fund could be established. Proposals on what should be an acceptable level of contributions and how the funds will be used are welcome.



**Time Capsule (EME Monument).** The absolute deadline for the acceptance of memorabilia to be inserted into the time capsules is July 31, 1995. If your unit has qualified, your contributions are to be directed to Maj MacPhail at CFSEME's Standards.



**OP Excelerate.** In NDHQ, OP Excelerate has generated a lot of activities during Fall 1994. It is a major project with very specific

objectives to provide responsive service to its clients. Under consideration are personnel reductions of at least 30%. 1 April 1996 is the targeted date for achieving significant change and resource reductions. Careful considerations will be made with respect to the impact on agencies outside NDHQ.



**CFP 314(0) and CFP 314(1).**

Extra! - CFP 314(0) "The Electrical and Mechanical Engineering Branch" and CFP 314(1) "The Land Maintenance System" are ready for publication. They should hit the streets in June 1995.



**EME Journal Distribution.** Three methods are currently used to distribute the EME Journal. The first method is by using the CFPD plate number and having a certain quantity mailed to each unit, base or formation with EME members. The second method uses a list made by DSIP so that each officer and CWO receives a copy. Finally the last method is by sending a limited quantity to each of the EME Associations. If you are not receiving sufficient quantities of the EME Journal contact the Editor.



**Unit Commanding Officer.** LCol R.N. Redman will be the next CO of 1 Service Battalion as of APS 95. LCol Redman is currently at Canadian Forces Language School Ottawa. Congratulations.



**Regimental Sergeant Major.**

CWO R. Desgagnés will be the next RSM of 5 Service Battalion as of APS 1995. CWO Desgagnés is currently employed at Directorate Personnel Careers. Congratulations.